

IN THE CLAIMS

1. (Previously presented) A digital micro-mirror device (DMD) package comprising:

a base substrate having a top surface and a bottom surface;

a semiconductor chip having a metallic layer formed on a back surface of the semiconductor chip without an adhesive layer therebetween;

a metallic adhesive between the base substrate and the semiconductor chip, thereby to attach the semiconductor chip to the base substrate with the metallic adhesive adhering to the metallic layer of the back surface of the semiconductor chip and with the metallic adhesive adhering also to the top surface of the base substrate;

one or more micro-mirrors mounted on a front surface of the semiconductor chip; and

a hermetic sealing means covering the front surface of the semiconductor chip including the one or more micro-mirrors.

2. (Previously presented) The DMD package of claim 1 which further comprises:

a heat sink attached on the bottom surface of the base substrate.

3. (Previously presented) The DMD package of claim 1, wherein the base substrate is selected from the group consisting of a ceramic board, a plastic board, and a printed circuit board.

4. (Previously presented) The DMD package of claim 1, wherein the metallic layer is selected from the group consisting of Va, Au, Ni, Ag, Cu, Al, Pb, Sn, Sb, Pd, and metal-containing compounds thereof.

5. (Previously presented) The DMD package of claim 1, wherein the metallic adhesive is solder.

6-11. (Cancelled)

12. (Previously presented) A digital micro-mirror device (DMD) package comprising:

a base substrate having a top surface and a bottom surface;

a semiconductor chip having formed on a front surface thereof one or more micro-mirrors and having formed directly on a back surface thereof a metallic layer; and

a metallic adhesive between the base substrate and the semiconductor chip, the metallic adhesive configured to attach the semiconductor chip to the base substrate with the metallic adhesive adhering to the metallic layer on the bottom surface of the semiconductor chip and with the metallic adhesive adhering also to the top surface of the base substrate.

13. (Previously presented) The DMD package of claim 12, wherein the base substrate is selected from the group consisting of a ceramic board, a plastic board and a printed circuit board, and wherein the metallic layer and the metallic adhesive have low melting points.

14. (Previously presented) The DMD package of claim 12 which further comprises:

a hermetic sealing means covering the front surface of the semiconductor chip including the one or more micro-mirrors.

15. (Previously presented) The DMD package of claim 12 which further comprises: a heat sink attached on the bottom surface of the base substrate.

16. (Previously presented) The DMD package of claim 12 wherein the metallic layer formed on the back surface of the semiconductor chip comprises a material selected from the group consisting of Va, Au, Ni, Ag, Cu, Al, Pb, Sn, Sb, Pd, and metal-containing compounds thereof.